Mechanical Design Engineer – LOGIX GURU

Key Responsibilities

- Design and develop innovative modular components and systems for manufacturing processes, with consideration for functionality, efficiency, scalability, safety, and sustainability.
- Utilize CAD software, including SolidWorks, AutoCAD, and Revit, to create detailed 3D models, assemblies, and technical drawings that meet design and manufacturing requirements.
- Collaborate with engineering teams, project stakeholders, and manufacturing personnel to define design requirements, assess feasibility, and identify optimization opportunities.
- Research materials, manufacturing methods, and industry best practices to improve product performance, reliability, and cost-effectiveness.
- Prepare and maintain comprehensive engineering documentation, including design specifications, bills of materials (BOMs), assembly instructions, and engineering change documentation.
- Interpret and apply engineering documents such as P&IDs, process flow diagrams (PFDs), site layouts, equipment layouts, piping plans, general arrangement (GA) drawings, specifications, and BOMs for packaged equipment system designs.
- Develop detailed 3D models and equipment layouts, including mating surfaces, component selection from part libraries, part modeling, assemblies, and exploded-view drawings with associated BOMs.
- Ensure all design deliverables meet quality standards, project requirements, and scheduled deadlines.
- Support purchasing, manufacturing, and assembly teams by providing accurate production-level drawings and technical design information.

Required Skills and Qualifications

- Proficiency in SolidWorks and other CAD design software.
- Strong understanding of manufacturing processes, materials, fabrication methods, and assembly techniques, particularly within modular construction and packaged systems.

- Excellent problem-solving and analytical skills, with strong attention to detail and the ability to translate conceptual designs into practical, manufacturable solutions.
- Effective verbal and written communication skills, with the ability to collaborate across multidisciplinary teams and interact professionally with internal and external stakeholders.
- Proven ability to manage multiple projects simultaneously, prioritize competing tasks, and meet deadlines in a fast-paced environment.
- Experience with packaged equipment, plant design, and facility layouts, including an understanding of operational, maintenance, access, and clearance requirements for mechanical, structural, electrical, and control systems.
- Working knowledge of applicable codes and standards, including NEC, IEC, ASME, AISC, AWS, UMC, OSHA, and relevant building codes.
- Self-motivated and capable of independently performing all aspects of mechanical design and 3D modeling with minimal supervision.
- Ability to produce accurate, production-ready drawings and documentation for purchasing, fabrication, and manufacturing departments.

Preferred Qualifications

- Experience designing skid-mounted, modular, or packaged process equipment.
- Familiarity with process equipment, piping systems, instrumentation, and industrial facility design.
- Knowledge of Design for Manufacturing (DFM) and Design for Assembly (DFA) principles.

Apply with an email to obaez@logixguru.com